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### ***Abstract***

In contrastive rhetoric the concept of *tertium comparationis* or common platform of comparison is important at all levels of the research: in identifying texts for building comparable corpora, selecting textual concepts to be examined across the corpora, and identifying and distinguishing between different types of linguistic resources used to realize these concepts. The present paper proposes a model of contrastive rhetoric research that starts with building comparable corpora on the basis of relevant similarity constraints or factors (e.g. the genre, subject matter, the level of writers' expertise, etc.) that might affect the expression of the textual concept(s) under comparison. Then the model proposes to establish common ground not only on the text functional and conceptual level but also on the text realization level for an adequate match of any two data sets before meaningful quantitative comparisons can take place. This kind of rigorous design is needed so that we can first have good baseline descriptions of given genres within given cultures and languages before we can compare and contrast features of those genres across cultures and languages. Using a study by Moreno (1998), we explain how such corpus-based quantitative studies can be designed and conducted with appropriate *tertium comparationis* from the corpus collection phase to the final analysis and interpretation.

### ***Keywords***

Tertium comparationis, contrastive rhetoric, similarity constraints, cross-cultural, discourse analysis, genre analysis, comparable corpora, research methodology, contrastive analysis

## ***Tertium comparationis: A vital component in contrastive rhetoric research***

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Contrastive rhetoric has had a significant impact on the teaching of second-language writing and thousands of English teachers around the world are thankful to Bob Kaplan for starting the field. Contrastive rhetoric is premised on the insight that, to the degree that language and writing are cultural phenomena, different cultures have different rhetorical tendencies. Furthermore, the linguistic patterns and rhetorical conventions of first language (L1) often transfer to writing in second language (L2). Kaplan's research was pioneering in calling attention to *cultural* differences in the *writing* of students of English as a second language (ESL) and English as a foreign language (EFL). This focus on writing was especially welcome for ESL instruction as the emphasis on oral language skills had dominated ESL contexts in the US and elsewhere.

The past 35-plus years since Kaplan's seminal article (1966) have produced an impressive set of research studies conducted in both ESL and EFL settings (for recent reviews see Connor, 1996, 2002.) Significant changes have taken place in contrastive rhetoric research in terms of *what* kind of writing has been studied and *how* it has been studied. There has been an increase in the type of written texts that are considered the purview of second language writing instruction around the world, and thus also the object of contrastive rhetoric research. The student essay, required still in the majority of school and college classes, is not any more the only type of writing taught in ESL and EFL classes. Other genres, such as the academic research article, research report, and grant proposal, are considered important in today's ESL instruction. While linguistic text analysis was the tool of choice in the first two decades of contrastive rhetoric research, writing and its study are today increasingly regarded as socially situated, with each situation requiring special consideration to audience, purpose, and level of expertise. Thus the expectations and norms of discourse communities or communities of practice (cultural and disciplinary) will help shape the writing practices of these communities.

Both of these two reasons—proliferation of writing types or genres and consideration of the social context—are placing new demands on the research methods of L2 writing cross-culturally. *Traditional* text analyses (e.g., analyses of cohesion, coherence, and textual superstructures) have been supplemented with "genre analyses," specific to genres such as research articles, book reviews, job applications, and grant proposals (cf. Bhatia, 1993; Connor, 2000; Swales, 1990). In addition, the study of the social context has called for adding ethnography and case study approaches to the analysis of texts.

Hyland (2000) advocates a methodology for investigating academic writing that considers writing as the outcome of social interactions and suggests that ethnography can provide valuable understandings about the ways writers negotiate their immediate situations. Yet, Hyland advocates the use of a *large* number of texts rather than a few to gain insights into the core values and beliefs of the communities. We concur with the following statement by Hyland about the need for the use of large number of texts rather than few for insights into the practices of the communities: "We do, however, need to examine what is conventional and typical in the behavior of skilled writers as they construct the meaning potential of their texts, constrained by the sense of a reader's expectation." (136)

Given that cross-cultural analysis needs large-scale textual analyses of written genres for baseline comparisons, it is important that we are comparing elements that can in fact be compared. In this chapter, we propose a new agenda for contrastive rhetoric for building well-designed corpora in L1 that can be analyzed using rigorous text analyses. These corpora can then be compared with equivalent English corpora. In such studies, the concept of *tertium comparationis* or common platform of comparison is important at all levels of research: in identifying texts for corpora, selecting textual concepts to be studied in the corpora, and identifying linguistic features that are used to realize these concepts. Common ground needs to exist on the conceptual level as much as on the explicit linguistic feature level for the juxtaposition of any two corpora. There needs to be an adequate match before mapping from one to the other can take place. This kind of rigorous corpus building is needed so that we will have good baseline descriptions of those rhetorics themselves within cultures and languages in order to compare and contrast rhetorics and genres across cultures and languages.

Using a study by Moreno (1998), we explain how such genre-specific corpus studies with appropriate *tertium comparationis* can be designed and conducted from the corpus collection to the final analysis and interpretation. The method of research we advocate for these studies can be best described as quantitative descriptive research as opposed to reflective inquiry, prediction and classification studies, sampling surveys, case studies and ethnographies, and quasi and true experiments (Connor, 1996). The method is different from most of the first contrastive studies (e.g., Kaplan, 1966), which relied on texts produced in English as a second language with no L1 comparable corpora.

The method consists of six phases: (1) an independent description of two parallel comparable corpora of expert L1 texts, (2) identification of comparable textual concepts (e.g., coherence relations, premise-conclusion), (3) operationalization of the textual concepts into linguistic features appropriate in each language, (4) quantitative text analyses, (5) juxtaposition of the analyzed corpora, and (6) explanation of the similarities and differences using contextual information about the languages and cultures in question.

Before explaining *tertium comparationis* and describing how it was used in Moreno's (1998) contrastive study, however, we will briefly discuss types of corpora used in contrastive writing studies as well as give background to the concept from the fields of contrastive analysis and translation studies.

### **Corpus types in contrastive studies**

Corpus linguistics is having a beneficial effect on contrastive studies, especially because it forces us to pay attention to corpus design. According to Johanssen (1998: 3), "a computer corpus is a body of texts put together in a principled way and prepared for computer processing." Johanssen writes about the importance of corpora for contrastive research and translation studies and classifies types of corpora as follows. *Parallel corpora* are corpora of comparable original texts in two or more languages. *Translation corpora* are corpora of original texts and their translations. Finally, *learner corpora* contain language by learners of a particular target language. In contrastive rhetorical studies, comparable corpora and learner corpora have been the most common. Learner corpora allow for the examination of interlanguage errors when they are used for comparison with native language writing in the target language, as in the International Corpus of Learner English project (Granger, 1996). Kaplan's (1966) work relied on learner corpora of ESL students' writing; no comparable native speaker corpus was employed, nor was a comparison made between the learners' L2 texts and the L1 texts of the same students.

As the study of contrastive rhetoric has advanced, there has been a growth in the use of comparable corpora. It is understood that apples should not be compared with oranges, nor student writing in an L2 with expert writing in the target language or the learner's L1. It is commonly agreed in contrastive rhetoric research that any attempt to determine whether the expression of given text-rhetorical constant in language A is similar or different from its expression in language B must begin by comparing how competent native speakers of both languages express it. Accordingly, Reid (1988: 19) argues that texts written by nonnative speakers – whether L2 texts or translations – do not constitute 'a sufficient data sample for valid analysis because they use second language texts to investigate first language rhetorical patterns' (19). The major reason is that in both cases it is mere speculation that the rhetorical conventions of the L1 may have been transferred or translated into the L2 texts. Thus, contrastive rhetoric studies should attempt to describe and explain differences or similarities in text-rhetorical patterns across cultures on the basis of comparable parallel corpora of texts, written independently by expert native speakers of each particular language/writing culture. Applying appropriate *tertia comparationis* at the design and analysis stages of contrastive research will help us build comparable corpora that can provide baseline data for meaningful cultural comparisons.

### **The concept of *Tertium Comparationis* in contrastive analysis and translation studies**

In contrastive analysis, it has been important to compare items that are comparable. The contrastive analyst James writes: 'the first thing we do is make sure that we are comparing like with like: this means that the two

(or more) entities to be compared, while differing in some respect, must share certain attributes. This requirement is especially strong when we are contrasting, i.e., looking for differences—since it is only against a background of sameness that differences are significant. We shall call this sameness the *constant* and the differences *variables*' (James 1980: 169).

In translation theory this factor of sameness has been referred to as *equivalence* or *tertium comparationis* (Chesterman, 1998). *Tertium comparationis* can be placed at any level of textual organisation, from microlinguistic levels (i.e., phonological, lexical and syntactic levels) to macrolinguistic levels (i.e., textual).

A useful guide to how contrastivists have understood the notions of equivalence is the work of Krzeszowski (1990). He adopts a taxonomic view to this concept and considers various types of equivalence: statistical equivalence, translation equivalence, system equivalence, semanto-syntactic equivalence, rule equivalence, substantive equivalence and pragmatic equivalence. It is beyond the scope of this paper to discuss these different conceptions and how they have evolved over time (cf. Chesterman, 1998; Moreno, 1996, for some revisions).

It is clear from contrastive analysis and translation theory, that the concept of equivalence or *tertium comparationis* is a relative concept, and that the original idea of *identity* is giving way to the idea of *maximum similarity*. The other conclusion seems to be that judgments about what constitutes maximum similarity and how it is to be measured depend on the assessors. Thus, definitions of equivalence, or maximum similarity, will be relative to the theoretical framework in which they are made.

### **The concept of *Tertium Comparationis* in contrastive rhetoric studies**

*Tertium comparationis* should be defined on the basis of concepts that are comparable cross-culturally and can be established at a variety of levels of analysis. This will imply defining the criteria of comparability, or prototypical features, that will make it possible to establish the constants of the comparison at two major phases of the research: (1) choosing the primary data and (2) establishing comparable textual concepts as constants. Establishing adequate *tertium comparationis* at these two levels will allow contrasts at subsequent levels of the research, namely at the explicit textual levels.

### **The primary data for comparison**

In quantitative descriptive studies, large data sets are needed. In Kaplan's early studies, more than 600 essays were included. Collecting large numbers of text is important because in descriptive studies it is not possible to manipulate the variables. When texts are collected, they are already products. All the possible variables affecting the production process (i.e., the mode, the author, the purpose, the setting, the topic) are already fixed and cannot be changed. If you change one, you get a different text. All variables, except the independent variables under investigation, need to be constant.

One of the greatest difficulties, however, in the comparison of texts across cultures is the selection of the appropriate texts for comparison. In the study his chapter builds on, Moreno was interested in comparing the use of premise-conclusion signalling devices between Spanish and English. Typical signals of this kind of coherence relation are the connectives “therefore” “as a consequence” as well as expressions such as “the results indicate that”. An example from Moreno’s corpus shows an explicit premise-conclusion relation between two sentences (not a condition in all premise-conclusion expressions because often causal relations are implicit or span many sentences):

The average profitability of U.S. industry is higher than that in Japan and Germany, yet American shareholders have consistently achieved no better or lower returns than Japanese (and recently Germany shareholders). <> There is *thus* no simple connection between average corporate returns on investment and long-term shareholder returns, as much conventional wisdom about shareholder value seems to suggest. (Moreno 1998: 555)

Naturally, Moreno wanted to generalize the results of her research as much as possible. Yet, to control for context, she decided on the genre of the academic research paper. To define the similarity constraint, Moreno argued, following Widdowson (1979), that there is a universal rhetoric of scientific exposition that is structured according to a certain discourse pattern which ‘with some tolerance for individual stylistic variation, imposes a conformity on members of the scientific community no matter what language they happen to use’ (Widdowson, 1979: 61). So the prototypical feature of *text form* = *scientific exposition* plus the prototypical feature of *genre* = *research article* were the first *tertium comparationis*. On this basis, Moreno chose 36 research articles in each language following conventional sampling procedures.

In addition to establishing a similarity constraint on the basis of the *genre*, Moreno (1998) conjectured that the *subject matter* (or *topic*) factor (directly related to a specific academic discipline) might also affect the expression of the phenomenon under comparison. She therefore decided that the two samples of research articles should be balanced in terms of *subject matter*. Accordingly, the resulting sample in each language/writing culture consisted of 18 research articles about marketing-management and 18 research articles about finance-economics. Thus the prototypical feature *subject matter* = *business and economics* was used as her second *tertium comparationis* for the design of her corpus in the sense that the two independent samples were made up similarly in this respect.

Thirdly, all research articles in the corpus were assumed to have been written in Spanish or English by expert members of the corresponding academic disciplines as they had been published in some of the most widely-read academic journals on business and economics. This similarity constraint involved the

application of another *tertium comparationis* to the selection of Moreno's corpus, that is, the prototypical feature *level of expertise = expert writer*.

Finally, although Moreno (1998) was looking at the expression of a given text-rhetorical variable in textual material included within the boundaries of complete texts (i.e., a further *tertium comparationis*), she predicted that not all sections of the research article could be considered homogeneous in terms of the frequency of occurrence of the phenomena under comparison. This variability could be due to the text type predominating in each section of the article (cf. Werlich, 1976). In order to control for this text-rhetorical variable, Moreno decided to balance her two independent corpora on the basis of similarity perceived in relation to the prototypical feature *global superstructure* (cf. van Dijk & Kintsch, 1983: 54). Thus, 11 research articles in each corpus followed the overall pattern of *Introduction-Procedure-Discussion* and 25 research articles in each corpus showed more variable superstructures: *Problem-Analysis-Solution*; *Situation-Explanation*; *Situation-Analysis-Forecast* and *Problem-Solution-Evaluation*. Table 1 includes a list of the similarity constraints in the study.

Table 1: Similarity constraints established for the design of Moreno's (1998) Spanish-English comparable corpus of research articles on business and economics.

| <i>Tertium comparationis</i>   | Value of prototypical feature perceived as a constant across the two corpora  | N of texts in each independent corpus |
|--|---|---------------------------------------|
| Text form  | Scientific exposition   | 36                                    |
| Genre  | Research article  | 36                                    |
| Mode   | Written language  | 36                                    |
| Participants <ul style="list-style-type: none"> <li>Writers</li> <li>Targeted readers</li> </ul>                           | <ul style="list-style-type: none"> <li>Researchers, professors and professionals in business and economics</li> <li>Researchers, professors, advanced students, top executives, politicians</li> </ul>  | 36                                    |
| Situational variety  | Formal  | 36                                    |
| Dialectal variety  | Standard  |                                       |
| Tone   | Serious   | 36                                    |
| Channel  | Graphical substance   | 36                                    |
| Format features <ul style="list-style-type: none"> <li>Length</li> <li>Intertextuality</li> <li>Visual features</li> </ul> | 2.000-16.000 words of core text<br>Reference to other texts,<br>Graphs, tables, drawings, footnotes,<br>appendixes, typographical distinctions<br>to indicate sections  | 36                                    |
| Point of view  | Objective   | 36                                    |
| Global communicative event   | Sharing results from research   | 36                                    |
| Setting  | An office, a library, etc.  | 36                                    |
| General purpose of communication   | Writer's viewpoint: To persuade the readers to share the writers viewpoint<br>Reader's viewpoint: To improve one's knowledge about a given field of research  | 36                                    |
| Global rhetorical strategy   | Demonstrating a theory<br>Discussing the advantages of: <ul style="list-style-type: none"> <li>applying a given model</li> <li>a given business practice</li> </ul> Analysing the reasons for a given situation<br>Proving the accuracy of a prediction<br>Evaluating the solution given to a situation     | 36                                    |
| Overall subject-matter or topic  | Business and Economics  | 36                                    |
| Academic discipline  | <ul style="list-style-type: none"> <li>Marketing-management</li> <li>Economics-finance</li> </ul>   | 18<br>18                              |
| Level of expertise   | Expert writers  | 36                                    |
| Textual unit of analysis   | Complete texts  | 36                                    |
| Global superstructure  | <ul style="list-style-type: none"> <li>Introduction-Procedure-Discussion</li> </ul> More variable superstructures: <ul style="list-style-type: none"> <li>Problem-Analysis-Solution;</li> <li>Situation-Explanation;</li> <li>Situation-Analysis-Forecast;</li> <li>Problem-solution-Evaluation.</li> </ul> | 11<br>25                              |
| Predominant text types<br>(Depending on the focus of each section in the superstructure of the article)                    | Argumentation;<br>Exposition;<br>Description.   | 36                                    |

(Adapted from Moreno, 1996: 162)



### **Establishing textual constants or *Tertia Corporationis* for qualitative equivalence**

Having established the similarity constraints for the design of the comparable parallel corpora, Moreno's study assumed that both Spanish and English language users employ the conceptual category of premise-conclusion to interpret and express coherence relations. This category is situated on the plane of suprapropositional meaning and allows for the interpretation of discourse segments above and beyond the semantic interpretation. This conceptual category is *functional* or *pragma-discursive* since it is defined contextually and is independent of concrete textual realizations.

Finally, after *pragma-discursive* equivalence, or similarity, was established as the qualitative *tertium comparationis* or prototype which helped to define the constants at text-linguistic levels of analysis, Moreno proposed the next concept, that of *statistical equivalence*. According to Krzeszwoski (1981), qualitative contrastive analyses alone are unable to produce useful results. Instead, they must be reinforced with quantitative contrastive analyses that investigate the relative frequencies of equivalent phenomena. Originally proposed by Becka (1978) for stylistic contrastive analyses, *statistical equivalence* allows the researcher to determine the equivalence of two groups of phenomena belonging to the same qualitative category if their relative frequencies do not display statistically significant differences. Moreno's contrastive examination showed that both language groups seemed to make premise-conclusion explicit with similar frequency. So, the phenomena under comparison displayed not only qualitative but also statistical equivalence.

### **Deciding on the textual variables**

Once the constants have been established on the basis of similarity judgments in relation to given qualitative categories (such as coherence relation = *premise-conclusion*) at a given level of analysis (e.g., discourse coherence), it is important to decide carefully which explicit textual variables to use in the subsequent quantitative analysis.

It must be stressed that the variables should be formulated according to a common theoretical framework that provides appropriate objective tools for analyzing textual material from the two languages. This is a difficult stage in contrastive rhetoric research since the descriptions of similar phenomena available in the two languages are likely to have used different theoretical frameworks, and may not be compatible. So, the task of the researcher is to choose or design tailor-made tools to apply to the analysis of the two text-rhetorical systems independently. In her study, Moreno built up an elaborate taxonomy of premise-conclusion signalling devices. Instead of relying on pre-existing taxonomies of coherence, she developed a system specifically for the study of premise-conclusion at the intersentential level of texts. Four levels of similarity constraints or *tertia comparationis* were established dealing with issues such as the directionality of the causal relation (anaphoric or cataphoric); whether the expression is modified (i.e., hedged) or not, etc. The taxonomy was used to classify every case of premise-conclusion signalling device

in the two comparable corpora. In this way, it was possible to juxtapose phenomena meeting the same criteria in order to search for similarities and differences.

The application of Moreno's contrastive model led to the determination of one area of great similarity between the Anglo-American and the Spanish writing cultures. Contrary to initial expectations, the use of signalling devices to express premise-conclusion in the particular rhetorical context of the research article proved to be very similar in both languages; that is, the same qualitative categories were identified after the analysis of the two corpora. Moreover, those strategies appeared similarly distributed, showing no statistically significant differences except in the distribution of use of integrated anaphoric signals. In other words, the two writing cultures used similar textual strategies for expressing premise-conclusion both qualitatively and quantitatively at the textual level. However, there were differences on the interpersonal plane, pointing to different conceptions of what is an appropriate rhetorical attitude and interactive tenor for offering claims to the academic community. Overall, Spanish academics seemed to hedge their conclusions less frequently than English academics, suggesting that the Spanish writers tend to show greater conviction and confidence in expressing their claims.

### **Conclusion: Towards a model of contrastive rhetoric research methodology**

Moreno's (1998) cross-cultural study of premise-conclusion in research articles has been used in this chapter to demonstrate the importance of the concept *tertium comparationis* in empirical contrastive rhetoric studies. In Moreno's study, the relational category of premise-conclusion was chosen as the conceptual category, which was studied in two comparable parallel corpora. Explicit textual variables were chosen and applied to the two corpora independently, and quantitative results were compared to establish similarities and differences between the two languages. Equivalences or *tertia comparationis* were created at a variety of levels including selecting data, establishing qualitative textual constants, and determining the explicit taxonomy for quantitative textual analysis. The strict *tertia comparationis* allowed Moreno to juxtapose text taxonomies and contrast the quantitative results for the comparable qualitative categories. After the interpretation of quantitative similarities and differences through statistical analysis, Moreno was able to draw conclusions about the comparative results.

Equal strict *tertia comparationis* should apply in other contrastive studies. Following Moreno's other work (1996, 1997), which dealt with other relational categories such as cause-effect, we could compare other relational categories such as concession, enumeration, opposition, etc., until we covered all possible explicit coherence relations, we would then be contributing to the descriptive characterisation of genres across languages. In addition, we could study rhetorical features such as audience awareness in texts across cultures. Similarly, other genres should be chosen for comparison such as the grant proposal or the application letter.

On the level of design, one implication for further contrastive analyses in this area of rhetoric is that their *tertia comparationis* should be based on functional meaning rather than on formal criteria. For example, if Moreno had restricted the comparison of premise-conclusion metatext to only connectives—a formal criterion—she would have left out of the analysis almost 50% of the resources available in each language to express a broadly similar functional-relational category.

On the level of methodology, Moreno's approach could be used to match comparable corpora in other genres. For instance, matching two corpora of grant proposals from two languages for contrastive research could be justified on the basis that both sets of texts are judged as similar in relation to the prototypical features included in the following proposed definition: global text units (*tercium comparationis* 1) belonging to the grant proposal genre (*tercium comparationis* 2) with the global communicative purpose of applying for funds to carry out research (*tercium comparationis* 3) (see. Connor & Mauranen, 1999).

Another possible application would consist of matching two sets of *moves* in comparable cross-cultural corpora. For example, one could compare closing evaluations in book reviews from two languages on the basis that both sets of textual units are judged as similar in relation to the prototypical features contained in the following definition: move units (*tercium comparationis* 1) belonging to the book review genre (*tercium comparationis* 2) with the purpose of evaluating the reviewed book in order to recommend it or not (*tercium comparationis* 3). In these two comparable corpora, similarity constraints would be defined in relation to the global communicative purpose (*tercium comparationis* 3) of a given textual unit (*tercium comparationis* 1) belonging to a particular genre (*tercium comparationis* 2) if those *tertia comparationis* are considered relevant in shaping the type of text-rhetorical phenomena under comparison, including its frequency of occurrence.

To sum up, the approach to contrastive rhetoric methodology that we propose for parallel corpora would consist of the following steps:

1. Formulating clear hypotheses about the relationship between writing cultures and how textual meanings are expressed.
2. Defining the population of expert L1 texts that can be considered comparable and specifying the basis for the similarity constraints.
3. Selecting a representative sample of that population in each writing culture compared.
4. Identifying comparable textual units (e.g., moves, such as *establishing the territory* or *creating a niche*, discourse functions such as *defining* or *evaluating*, pragmatic functions such as *requesting* or *apologising*, and relational functions (i.e., coherence relations such as *cause-effect* or *claim-support*).
5. Validating those units of analysis as recognisable functional or pragma-discursive units by language users in each culture either through literature review or further research (e.g., through interviews with L1 informants). This verification would allow the researcher to

propose these units as *language/textual universals*, which can be taken as qualitative *constants* for the two (or more) languages compared and allow juxtaposition of comparable rhetorical phenomena.

6. Quantifying the occurrence of these textual universals in each corpus. This step allows the researcher to propose these categories as *quantitative constants* if they occur with similar frequency in both languages.
7. Devising objective criteria to describe the textual realizations of the universals proposed in the two languages. This phase would imply designing specific criteria that do not privilege one language over the other. In other words, the criteria should not be biased towards any particular descriptive model of any of the languages compared.
8. Applying the devised analytical criteria to the description of the two corpora independently.
9. Juxtaposing the taxonomies.
10. Contrasting the quantitative results for each comparable qualitative category.
11. Interpreting the significance of quantitative similarities and differences through statistical analysis.
12. Drawing conclusions about the relationship between writing cultures and how textual meanings are expressed on the basis of the comparative results.

The methodology discussed in this chapter applies to contrastive studies using parallel corpora in any two languages. Such parallel corpora are needed if there is no previous empirical research or proven theory concerning similarities and differences in linguistic/rhetorical structures in a given genre between the two languages and cultures. That was the case in Moreno's study. However, when such baseline comparisons are available, it is also possible for contrastive rhetoricians to design studies using translation and learner corpora, and the work of Krzeszowski (1990) and Chesterman (1998) is especially helpful in formulating appropriate *tertia comparationis*. Clearly, *tertia comparationis* are still needed for many languages and genres at the levels of data selection and analyses.

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